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EXAMINER

PAYNE, SHARON E

ART UNIT PAPER NUMBER

2875

DATE MAILED: 03 05 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/824,966

Applicant(s)

KONOMI, APOSTOL

Examiner

Sharon E. Payne

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133)
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 16 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-17 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informality: the phrase "light directing" should be "light-directing" in line 6. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 is indefinite because it depends on claim 18, which has been cancelled by amendment. For purposes of this office action, claim 19 is being treated as if it depends on claim 1.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7, 9-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easterday et al. (U.S. Patent 1,931,577) in view of Ashall (U.S. Patent 5,625,968).

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Regarding claim 1, Easterday et al. discloses two display signage panels (reference number 18) having a desired design face (Figs. 1 and 2); a light source (reference number 14) offset from and behind the two display signage panels (Fig. 2); a light directing panel (reflector, reference number 26) located behind at least one of the two display signage panels (Fig. 2), whereby light directly incident on the at least one display signage from the light source and redirected light from the light directing panel backlight and illuminate the two display signage panels, or at least one display signage panel (Figs. 1 and 2). Easterday does not disclose a second light source.

Ashall discloses a second light source (column 2, lines 15-17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the second light source of Ashall in the apparatus of Easterday et al. for providing additional light.

Concerning claim 2, Easterday et al. does not specifically disclose the dimensions of the box, the thickness in particular.

Determining the thickness of a lighting display is considered to be an obvious variation in design. Since the light display box is well known in the art, it would have been obvious to one of ordinary skill in the art to determine an overall thickness in the Easterday et al. reference for distributing light as desired.

Regarding claim 3, Easterday et al. does not disclose signage panels constructed of two sheets plastic that hold a picture between them. Ashall discloses the use of plastic sheets (column 2, lines 48-49) and signage panels constructed of two sheets (reference numbers 16 and 17, Fig. 2b).

Using two plastic sheets with a width of 2 mm each is considered to be an obvious variation in design. Since using plastic for signage is well known in the art as is using two sheets, it would have been obvious for one skilled in the art to use two plastic sheets with a width of 2 mm for holding the signage in the Easterday et al. reference.

Concerning claim 4, Easterday et al. discloses a light-directing panel that comprises two sides (Fig. 2).

Regarding claim 5, Easterday et al. discloses a light-directing panel comprising four sides (Fig. 2). (Each inclined face of the light-directing panel has a front and a back.)

Concerning claim 6, Easterday et al. does not disclose at least a portion of the light-directing panel being substantially transparent. Ashall discloses a light-directing panel (reference number 10) that is substantially transparent for allowing light incident thereon to pass through the light-directing panel and toward the display signage panel (column 2, lines 65-67).

Concerning claim 7, Easterday et al. discloses a light-directing panel that is completely non-transparent (reference number 26, reflector).

Regarding claim 9, Easterday et al. discloses two display signage panels having a desired design face (reference number 18), a first display signage panel and a second display signage panel (Fig. 2, reference number 18 on each side), wherein the light source (reference number 14) is offset from and located substantially equidistantly from the first display signage panel and the second display signage panel (Fig. 2), and the light-directing panel being located substantially equidistantly between the two display

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signage panels (Fig. 2) whereby light directly incident on each display signage panel from the light source and redirected light from the light-directing panel backlight and illuminate the first display signage panel and the second display signage panel (Fig. 2). Easterday does not disclose the second light source.

Ashall discloses the second light source for the reasons discussed in the analysis of claim 1.

Concerning claim 10, Easterday et al. discloses the two display signage panels (reference number 18) having the same height and length (Figs. 1 and 2).

Regarding claim 11, Easterday et al. does not disclose signage panels that are as tall as the glass portion of the two light sources.

Ashall discloses the two display signage panels being substantially as tall as the glass portion of the two light sources (Fig. 1, column 2 in lines 16-17, column 2 in lines 43-49). The glass portion of the light source in Fig. 1 is shown as being the same width as the display signage panel, and the specification indicates that a light may be used on another side, which may be a vertical side (column 2, lines 16-17). To implement this invention, the glass portion of any lights on the vertical side would have to be the same length as the vertical side.

Concerning claim 12, Easterday discloses a light-directing panel (reference number 26) that is substantially the same height as the two display signage panels (reference number 18, Fig. 2).

Regarding claim 13, Easterday does not disclose a light-directing panel that has substantially the same height as the glass portion of the two light sources.

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Ashall discloses the light-directing panel that has substantially the same height as the glass portion of the two light sources (Fig. 1, column 2 in lines 16-17, column 2 in lines 43-49). The glass portion of the light source in Fig. 1 is shown as being the same width as the light-directing panel, and the specification indicates that a light may be used on another side, which may be a vertical side (column 2, lines 16-17). To implement this invention the glass portion of any lights on the vertical side would have to be the same length as the vertical side.

Concerning claim 14, Easterday et al. discloses a housing (reference number 10) for supporting two display signage panels or at least one display signage panel (Figs. 1 and 2).

Regarding claim 15, Easterday et al. discloses the interior of the housing is at least partially reflective surface for reflectively directing light toward the two display signage panels or at least one display signage panel (page 1, lines 78-88).

Concerning claim 16, Easterday et al. discloses a housing that is constructed of a rigid material (page 1, lines 60-61).

Regarding claim 17, Easterday discloses a housing that further houses electrical circuitry associated with powering the double-sided edge lighting-type display sign, wherein the electrical circuitry is configured not to interfere with the backlighting and illumination of the two display signage panels (Fig. 1). (The wire, reference number 15, is the electrical circuitry.)

For purposes of this office action, claim 19 is being analyzed as if it depends on claim 1 instead of cancelled claim 18. Regarding claim 19, Easterday does not disclose

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fluorescent bulbs. Ashall discloses the light sources comprising elongated fluorescent bulbs (column 2, lines 50-55, Fig. 1).

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Easterday et al. in view of Ashall as applied to claims 4 and 5 above, and further in view of Murase et al. (U.S. Patent 5,283,673).

Regarding claim 8, Easterday et al. does not disclose the distance between two light sources being less than 65% of the length of the two light sources. Murase et al. discloses the distance between the two light sources (reference number 14) being less than 65% of the length of the two light sources (Fig. 6) to illuminate the display.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make a plurality of light sources have the same distance between each other as those in Murase et al. reference to illuminate the display sufficiently in the Easterday et al. reference.

Response to Arguments

6. Applicant's arguments filed 16 December 2002 have been fully considered but they are not persuasive.

Applicant goes to great lengths to argue that the transparent sheet of Ashall is not a light-directing panel. To the contrary, the transparent sheet 10, by itself, directs light according to the laws of refraction, which makes it a light-directing panel. Even if the apparatus in Ashall works differently, the transparent sheet itself directs light,

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making it a light-directing panel. Furthermore, Easterday et al. is the primary reference for the light-directing panel, and the arguments are largely moot in view of this new reference.

Applicant further argues that determining the thickness and width of the lighting display are not obvious variations in design because determining the thickness of the display and the width of the plastic sheets are crucial steps to determining the distance that the light travels and optimizing light use. To the contrary, such considerations are merely those a person of ordinary skill in the art uses to determine the thickness of the apparatus and the width of the sheets. It is not an inventive concept.

The arguments regarding claims 8 and 15 are rendered moot in view of new grounds of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Reininger (U.S. Patent 1,550,001) discloses a sign.

Trame (U.S. Patent 3,409,765) discloses a sign.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharon E. Payne whose telephone number is (703) 308-2125. The examiner can normally be reached on regular business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (703) 305-4939. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

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872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

sep
February 25, 2003

A handwritten signature in cursive script, appearing to read "J. Smith", written in black ink.